

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-15 (Cancelled).

16. (New) A reaction probe chip for binding an analyte to be detected, comprising:

a plurality of stacked substrates each being in the form of film or sheet, and having a plurality of through-holes, said substrates being stacked so that said through-holes are aligned;

carriers filled in the aligned through-holes, said carriers being relatively porous compared to said substrates; and

first probe molecules attached to surfaces of the carriers in a first group of the through-holes for binding the analyte to be detected,

second probe molecules attached to surfaces of the carriers in a second group of the through-holes, wherein the first probe molecules are different from the second probe molecules.

17. (New) A reaction probe chip according to claim 16, wherein the carriers are of porous glass having pore sizes of from 0.1 to 0.5 micrometers.

18. (New) A reaction probe chip according to claim 16, wherein the probe molecules are selected from the group consisting of DNA, RNA, PNA, their fragments, oligonucleotides, antigens, antibodies, epitopes, enzymes, proteins, and their polypeptide chains having at least one functional site.

19. (New) A reaction probe chip according to claim 16, wherein surfaces of the substrate are smoothed whereby aligned respective through-holes of adjacent substrates are liquid-tight so that liquid will not move laterally between said contacting surfaces to reach spaced apart through-holes.

20. (New) The reaction probe chip according to claim 16, wherein said plurality of stacked substrates comprises a pair of sheets, and said carriers comprise a porous material.

21. (New) The reaction probe chip according to claim 20, wherein said porous material is porous glass powder or a glass fiber filter paper.

22. (New) A reaction probe chip of claim 16, wherein said carriers are particles having a particle size of from 1 to 100 micrometers.

23. (New) A reaction probe chip of claim 17, wherein said carriers are particles having a particle size of from 1 to 100 micrometers.

24. (New) A reaction probe chip for detecting analytes, comprising:

a substrate having a first and second through-holes;  
a first carrier made of porous glass having first probe molecules attached to a surface of the first carrier, wherein the first probe molecules are capable of binding to a first analyte; and

a second carrier made of porous glass having second probe molecules attached to a surface of the second carrier, wherein the second probe molecules are capable of binding to a second analyte, and wherein the first and second through-holes are filled with the first and second carriers respectively.

25. (New) The reaction probe chip according to claim 20, wherein said plurality of stacked substrates comprise a pair of plastic sheets and said carriers comprise a porous sheet sandwiched between said plastic sheets.

26. (New) The reaction probe chip according to claim 20, wherein said substrates are glass plates or plastic films.

27. (New) The reaction probe chip according to claim 26, wherein said plastic films are polyethylene films or polyester films.